From: "Kevin Abernathy" <kevina@cdc-cfu.com>
To: "Polly Lowry" <LowryP@rb5s.swrcb.ca.gov>
Date: 11/4/04 3:05PM
Subject: Draft

Polly,
Attached is our response for the RWQCB's consideration concerning the NPDES and WDR general order for CAFO's
We appreciate the time you'll take to address our concerns.And look forward to your comment's in the future

Thank You,
Kevin Abernathy
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California Dairy Campaign

"Dairymen Working For Dairymen"

November 4, 2004

Ms. Polly Lowry
Regional Water Quality Control Board, Central Valley Region
11020 Sun Center Dr. #200
Rancho Cordova CA 95670

Re: Comments and perspectives, pertaining to Administrative Draft, National Pollutant Discharge Elimination System (NPDES) General Permit and Waste Discharge Requirements (WDR) General Order For CAFO's.

Dear Ms. Lowry:

The California Dairy Campaign (CDC) is a grassroots organization of dairy farmers. Representing approximately 400 dairy farms, ranging from small to large CAFO's. CDC is a member organization of the California Farmers Union (CFU), which represents family farmers throughout the state. CDC and CFU are member organizations of National Farmers Union (NFU) which represents more than 300,000 farmers nation wide. Our comments are a collaboration of California Dairy Campaign an industry trade group, Blankinship & Associates, Agricultural and Environmental, Engineers, Circul8 Systems, Certified Nutrient Specialist and a prominent financial lending institution. This letter presents our comments, questions, and concerns on the draft, along with a perspective of solutions based on nutrient cycling, management and technology that are currently improving the environment. Our comments are as follows:

1. We are very concerned that the Board's attempt to implement an extremely complex set of regulations on family dairy farms in the central valley of California. Instead of looking into proactive outreach and education-oriented solutions that protect California waters, we feel the proposed regulations ignore existing dairy programs and are too punitive in nature. Given the limited resources of the typical California dairyman, our objective is to implement cost-effective water resource protection.

2. May we suggest that the word "waste" be eliminated throughout the permit and any further discussions. The word waste is offensive to many and does not accurately describe the product with which you are scrutinizing. "Nutrient cycling" is a more appropriate term for the byproduct from cows.

3. We feel most of the effort has been regulatory in nature and very little has been educational oriented. We would like the Board's response on why their emphasis has been on regulations in lieu of education?

4. We would also like to know what documentation of problems or historic data exists to substantiate your current approach? Please present a case for problems before moving to regulations. According to the Central Valley RWQCB, as little as 8 years ago 40% of approximately 2000 California dairies were non-compliant, today as little

as 5% may be out of line with the Clean Water Act. Why then would the Board wish to group all the dairies under the bad apple scenario? When in reality, time would be best spent educating those 95 +/- dairies rather than potentially penalizing 1900 dairy farms with burdening regulations that do not look at management and technology that protect California waters.

5. We wish to address the financial impact as it relates to hiring professionals, required to complete the drafts as it stands in relation to income of impacted farms. Under the draft permit's schedule of tasks, we estimate an expense ranging from $40,000 to $60,000 per dairy. This does not include the re-occurring annual cost of sampling and reporting. This does not include the cost associated with installation of monitoring wells in varying lithology throughout the state. The approximate cost of constructing monitoring wells ranges from $45 to $100 + per foot, per well. Depending on drilling conditions, the installation of three 50 foot monitoring wells may cost up to $15,000.The average dairy farmer cannot fathom paying the significant additional costs that return nothing to the farm.

   The board needs to question their direction and take into account all the impacts that you'll place on the California economy, due to loss of jobs, taxes and monies spent by our dairy farmers in their local communities. You cannot follow the trail from the consumer to the farm and not see the impact of such a far-reaching regulatory compliance annihilating the economic backbone of California. California would see more environmental benefits by shifting a rather useless expense of creating paper trails to a pro-active stance of educating, dairy farms on management practices and technology that benefit the environment in which they must maintain to stay in business.

   Example 1: In the year of 2002 based on an average herd size of 1400 + cows the average income per cow was a loss for the year at $21.00 per animal. Dairy farmers were in the red for the full year and incurred tremendous losses. In the year of 2003 based on an average herd size of 1400 + cows the average income per cow for the year was a profit of $53.00 per animal. Again in 2003 these same dairy farmers struggled with cash flow.

   Example 2: A CAFO with 700 lactating and non-lactating animals, based on CDFA cost analysis information **lost** for the year of 2002 a total of $292,000 and in 2003 another **loss** of $217,000 for a total **loss** of approximately, $519,000 in 24 months.

   Based on these two scenarios, California dairy farmers would be over burdened financially, having no cash flow to pay out additional expenses incurred for their operation. This has the potential to continue to transition our industry toward larger and larger CAFO's managing 1500 + lactating animals. This has the potential to obliterate the smaller family dairy farm. That will not be able to compete, due to the financial burdens placed on them. Is this truly the direction the Board wishes to head?

6. We are concerned in regards to ground water monitoring. What if there are areas in the valley that already exceeds the determined level for nitrates? If these areas are already in noncompliance will there be litigation by third parties? What protection will there be for the dairy producers who, at there own expense, will pay for the well monitoring and submit this information, which will become public information. It is

not far fetched to think that a third party environmental group that has been fighting the dairy industry already won't use this information against the dairy producer. We would like to see language that protects the dairy producer against a third party lawsuit from the information that they have willingly provided at their own expense. The Board needs to consider the cost will vary significantly depending on site conditions (geology, depth to water) and dairy size.

7. It is of grave concern to require the removal of all standing water in a corral within 24 hours. While most dairy producers try to grade and mound them for runoff, corrals are inhabited by large animals. These animals are constantly rearranging the soil gradient. A 72 or 96 hour window will be more possible for the dairy producer than 24 hours. Why create and adopt regulations that once adopted will automatically put the producer in violation. It is these types of regulations that third parties look for in order to litigate and stop the dairy industry.

8. We would like the Board to respond to their analysis of on going programs in the state, which could have assisted, in comprehensive, workable programs. Examples are:
    1. CDQAP
    2. NRCS
    3. UCCE (Mathews Harter)
    4. UC Riverside Committee of Consultants
    5. SWRCB (John Menke)
    6. RWCQB (Louis Pratt)
    7. Merced County, etc.
    8. Industry Trade Groups (CDC, etc.)

    The Board must recognize and enhance existing outreach and education potentially through these programs.

9. We are concerned about the verbage in the report. We recommend that the Board take a serious look regarding professional certification because most PE's and RG's will not certify what you are asking for in the administrate draft.

10. We would like the Board to analyze some proposed solutions based on a screening process that looks at these factors:
    1. Size of facility
    2. Depth to ground water
    3. Compliance history
    4. Financial impact to producer
    5. Variable degree of regulation based on potential threat to California waters

11. We wish the Board to emphasize good agronomy through the use of existing CNMP template tools (Merced County) along with providing funding for missing or deficient CNMP elements (such as nutrient crop and soil analyses and flow meters).

12. We would like to make a formal presentation to the Board about a concept regarding nutrient management in which today we are currently seeing fantastic

environmental benefits on numerous California dairy facilities today.

In conclusion, we appreciate the opportunity to comment on these proposed regulations. We also would like the Board to know that CDC along with other stakeholders are more than willing to work with the RWQCB on preparing a workable plan that meets the concerns of all Californians. We reiterate that the RWQCB needs to actively facilitate participation of all stakeholders to finally achieve a common objective**, a cost effective water resource protection plan.**

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Attachments: (1) Comments and questions regarding NPDES and WDR requirements
(2) Appendix A

APPENDIX A

Nutrient Flow

To understand the potential solutions, we must first clearly and simply identify the problem. The problem that faces the dairy industry is “Nutrient Flow”, or using other words we could say:

1. Nutrient redeployment
2. Nutrient relocation
3. Nutrient redistribution

Following that understanding we can begin a discussion of sustainable solutions to address the problems for something to be “sustainable”, it must be economically viable, environmentally sound and socially acceptable. To achieve this, all decisions must consider both short – and long-term impacts on these three elements. The only decision-making process that meets these criteria is Holistic Management. Traditional decision-making looks at things more from a mechanical standpoint rather than understanding the whole system.

Here is a “simplified” example:
Dairy manure can contaminate ground water. In particular nitrate has been found in groundwater samples at several locations.

What is the nutrient component of nitrate? It is nitrogen.

Is it desirable to allow nitrogen to be leached into the ground water?

Answer: NO; because:

1. Drinking water is compromised and becomes a detriment to human and animal health.
2. The health of all humans can be affected by nitrate-contaminated drinking water; the real world results being impairment, sickness and death.
3. The dairy operation that used the affected drinking water for their cow is losing untold dollars every day of every year to the affects of the compromised water on their animals.

Soil Biology Primer (USDA Publication)

1. Focus on maintaining Nutrient Balance in the soil, which will keep the soil healthy and enable the sequestration .
2. “Soil organisms decompose organic compounds, including manure, plant residue, and pesticides, preventing them from entering water and becoming pollutants. **They sequester nitrogen and other nutrients that might otherwise enter groundwater,** and they fix nitrogen from the atmosphere, making it available to plants.”
3. “Nutrient cycling. When organisms consume food, they create more of their own biomass and they release wastes. The most important waste for crop growth is ammonium (NH4+). Ammonium and other readily utilized nutrients are quickly taken up by other organisms, including plant roots. When a large

variety of organisms are present, nutrients may cycle more rapidly and frequently among forms that plants can and cannot use. Nutrient retention. In addition to mineralizing or releasing nitrogen to plants, the soil food web can immobilize or retain nitrogen when plants are not rapidly growing. Nitrogen in the form of soil organic matter and organism biomass is less mobile and less likely to be lost from the rooting zone than inorganic nitrate (NO3-) and ammonium (NH4+)."

4. The board's focus must consider shifting away from waste to new paradigm of thinking. Emergence of integrated nutrient cycling and Life Cycle Assessment (LCA). Viewing nutrients as a cycle, rather than an end, is a starting requirement. Designed-for-environment systems are needed, where a nutrient-cycle paradigm dominates. We recognize global cycles for water where we are drinking the same water the dinosaurs used. The same exists for other nutrients. Life Cycle Assessment (LCA) tools must be employed in animal agriculture, as in other industries, to assess and limit the environmental effects of animal production enterprises. The LCA approach will foster strategies to better manage nutrients entering enterprises, to increase their inclusion in marketed products, and limit the potential for losses.
   * CDC can facilitate future education of LCA's to the board.

Nutrient Flow (based on information from Oregon State University, Iowa State University and The Fertilizer Institute www.tfi.org)

Each year 1,400 pound cow producing 70 pounds of milk per day

Consumes in her feed:			>>>>> 100 Cows <<<<<
400 lbs.	Nitrogen	(N)	40,000 lbs. N
65 lbs.	Phosphorus	(P)	6,500 lbs. P
195 lbs.	Potassium	(K)	19,500 lbs. K

>>>>>>>>>>>>>>>>>>>> Where does it go ?

Milk:		
100 lbs.	Nitrogen	10,000 lbs. N
20 lbs.	Phosphorus	2,000 lbs. P
30 lbs.	Potassium	3,000 lbs. K

Manure: Nutrient returned to soil in liquid/solid form

300 lbs.	Nitrogen*	30,000 lbs. N @ $.30=$ 9,000/yr,
45 lbs	Phosphorus*	4,500 lbs. P @ $.50=$ 2,250/yr.
165 lbs	Potassium*	16,500 lbs. K @ $ .40=$ 6,600/yr.
		$ 17,850/yr.

Treating the material as a resource can create a new income stream for the dairy.

Composted solids Bio liquids

* Don't be confused. Many tests show phosphate P_2O_5 and potash K_2O.
Here are the conversions:
P X 2.27 = P_2O_5 or P_2O_5X.44=P
K X 1.2 = K_2O or K_2O X .83=K

Based on this simplified version presented we can now look at regulations from a new and emerging mind set of nutrient cycle management. Along with the potential to create new profit centers from an innovative perspective.

Regulations should focus on a direct understanding of the biological system related to manure management.

Regulations should strive to reward good stewards of the nutrients.

Regulations should control and or educate those who are not good stewards of the environment.

Reward good stewards who demonstrate, thru soil testing and drinking water well testing the ability to be in compliance through maintaining a high environmental standard.

Problem facilities, should work on education from CNMP paradigm with additional testing of the soil, drinking water through applied agronomic practices.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

Order No. ____
NPDES No. _____

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT
AND
WASTE DISCHARGE REQUIREMENTS GENERAL ORDER
FOR
EXISTING CONCENTRATED ANIMAL FEEDING OPERATIONS (MILK COW DAIRIES)

The California Regional Water Quality Control Board, Central Valley Region (hereafter, Regional Board), finds that:

REASON FOR THE REGIONAL BOARD ISSUING THIS PERMIT

1. The Regional Board authority to regulate waste discharges that could affect the quality of the waters of the state, which includes both surface water and groundwater and the prevention of nuisances, is found in the Porter-Cologne Water Quality Control Act (California Water Code Division 7).

2. In regulating waste discharges, the Regional Board implements both federal and State laws and regulations. California regulations governing discharges from confined animal facilities are contained in Title 27 of the California Code of Regulations (CCR), Division 2, Subdivision 1, Chapter 7, Subchapter 2, Article 1 (Title 27). Federal regulations governing discharges from concentrated animal feeding operations (CAFOs) are set forth in Title 40 Code of Federal Regulations (CFR) Parts 122 and 123 and in "Effluent Limitation Guidelines and Standards for CAFOs" in Title 40 CFR Part 412.

3. Recent revisions to Title 40 CFR Parts 122, 123, and 412 took effect on 14 April 2003. The federal regulations now require all CAFOs to apply for a National Pollutant Discharge Elimination System (NPDES) Permit.

4. For the purposes of this Order, CAFOs include all existing milk cow dairy facilities that meet the size threshold of a Large CAFO, which is defined in Title 40 CFR Section 122.23(b)(4) as 700 or more mature dairy cows.

What about dairies with less than 700 ? What plans have the RWQCB made to accommodate this section of the industry?

5. There are approximately 1,000 milk cow dairies within the Central Valley Region that are of sufficient size that they are required to seek coverage under an NPDES Permit. Each CAFO represents a significant source of waste discharge with a potential to affect the quality of the waters of the state.

6. For the purposes of this Order, "waste" includes, but is not limited to, dry manure, and process wastewater resulting from water directly or indirectly used in the management of a CAFO or resulting from any of the following: spillage or overflow from animal watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other animal feeding operation facilities; direct contact swimming, washing, or spray cooling of animals; or dust control. Waste also includes any water or precipitation that came into contact with raw materials, products, or byproducts such as manure, compost piles, feed, silage, milk, or bedding.

7. This Order implements the requirements of Title 40 CFR Parts 122, 123, and 412 for CAFOs, Title 40 CFR Part 131.12 (the federal Antidegradation Policy), State Water Resources Control Board Resolution 68-16 (*Statement of Policy with Respect to Maintaining High Quality of Waters in California*), Title 27 CCR for confined animal facilities, the Regional Board's Water Quality Control Plan for the Sacramento and San Joaquin River Basins (4th Ed.) and the Water Quality Control Plan for the Tulare Basin (2nd Ed.) (Basin Plans) and other applicable plans and policies of the State and Regional Boards described in the Fact Sheet, which is attached to and made part of this Order.

8. Coverage under this general NPDES permit is limited to those CAFOs that are **not** "new sources" as defined in Title 40 CFR Section 122.2 and 122.29(b) consistent with the California Water Code Section 13389 and are "existing" facilities as of _____ **2004 [the date of noticing the tentative permit]**.

Problem: What regulations pertain to new dairies?

9. This Order may also apply to existing milk cow dairies that do not meet the size definition of a CAFO if they request coverage and comply with the requirements of the Order and that request is approved by the Executive Officer.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

10. California Water Code Section 13389 states as follows:
"*Neither the state board nor the regional boards shall be required to comply with the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code prior to the adoption of any waste discharge requirement, except requirements for new sources as defined in the Federal Water Pollution Control Act or acts amendatory thereof or supplementary thereto*."

11. California Water Code Section 13389 provides a statutory exemption from the California Environmental Quality Act (CEQA) for the adoption of NPDES permits.

12. The CEQA exemption under the California Water Code is inapplicable to NPDES permits for "new sources," as defined by the Clean Water Act and implementing regulations.

13. The Regional Board is the lead agency under CEQA (Public Resources Code Section 21000 et seq.) with respect to adoption of this Order.

14. In addition to the statutory exemption provided by the California Water Code Section 13389, the CEQA regulations at Title 14 CCR Section 15301 provide a categorical exemption from CEQA for Existing Facilities that applies to "*…the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination…*"

15. The adoption of this Order is statutorily exempt from CEQA based on California Water Code Section 13389 because it does not apply to "new sources" as defined in the Clean Water Act Section 306 or in Title 40 CFR Part 122. The adoption of this Order is also categorically exempt from CEQA because, consistent with the "existing facility" exemption in Title 14 CCR Section 15301, eligibility is limited to CAFOs that are existing facilities.

16. This Order imposes significantly new and more stringent requirements compared to previous waste discharge requirements or waivers of waste discharge requirements that have applied in the past to these existing facilities. This Order requires compliance with applicable federal CAFO technology-based standards and more stringent water-quality based standards, including compliance with applicable water quality objectives. As a result, the CAFOs will be required to reduce impacts to surface water and groundwater upon compliance with this Order. This Order prohibits discharges of waste to surface water except as authorized in the federal CAFO regulations. Any surface water discharges allowed must comply with applicable water quality objectives and not cause pollution or nuisance. This Order also requires that CAFO discharges of waste shall not cause groundwater to be degraded, to exceed water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

GENERAL FINDINGS

17. The construction of individual facilities may require permits or authorizations from other state or local agencies that may require compliance with CEQA including Public Resources Code Division 13, Chapter 3.

18. This Order does not authorize violation of any federal, state, or local law or regulation.

19. As stated in California Water Code Section 13263(g), the discharge of waste into waters of the state is a privilege, not a right, and this Order does not in any way create a vested right to continue the discharge of waste. Failure to provide the level of management required to preclude conditions that threaten pollution or nuisance will be sufficient reason to modify, revoke, or enforce this Order, as well as prohibit further discharge.

20. The Findings of this Order, supplemental information and details in the attached Fact Sheet, and the Regional Board record on CAFOs, were considered in establishing the conditions of discharge.

21. The Regional Board has publicly notified interested agencies and persons of its intent to issue this Order for discharges of wastes from CAFOs, and has provided them with an opportunity for a public hearing and an opportunity to submit comments.

22. The Regional Board, in a public meeting, heard and considered all comments pertaining to discharges of wastes from CAFOs proposed to be regulated under this Order.

IT IS HEREBY ORDERED that, pursuant to California Water Code Sections 13260, 13263, 13267, 13377, and 13383, and in order to meet the provisions contained in Division 7 of the California Water Code and regulations and policies adopted thereunder and the provisions of the Clean Water Act as amended, and regulations and guidelines adopted thereunder, owners and operators of existing milk cow dairies subject to the federal CAFO regulations (hereinafter Dischargers), their agents, successors, and assigns shall comply with the following:

A. PROHIBITIONS

1. The discharge of designated waste or hazardous waste, as defined in California Water Code Section 13173 and Title 23 CCR Section 2521(a), respectively, is prohibited.

2. The direct or indirect discharge of waste from the production area to surface waters is prohibited unless the discharge: (1) consists of overflow of manure or process wastewater from a facility designed, constructed, operated and maintained to contain all manure and process wastewater including the runoff and direct precipitation from a 25-year, 24-hour rainfall event; and (2) does not cause the receiving water to exceed water quality objectives as specified in the applicable Basin Plan(s).

3. The disposal of waste not generated by on-site animal production activities is prohibited unless a Report of Waste Discharge for the disposal has been submitted to the Executive Officer and the Regional Board has issued or waived waste discharge requirements (WDRs).

4. The disposal of dead animals in any liquid manure or process wastewater system is prohibited as specified in Title 40 CFR Section 412.37(a)(4). In addition, the disposal of dead animals at the facility is prohibited unless a Report of Waste Discharge for the disposal has been submitted to the Executive Officer, the Regional Board has issued or waived WDRs, and the disposal complies with all state and local laws and regulations (see General Specification B.18).

5. The discharge of waste to lands not owned or controlled by the Discharger without written permission from the landowner or in a manner not approved by the Executive Officer, is prohibited.

6. All animals shall be prohibited from entering any surface water within the confined area.

How is surfacewater defined? Puddles? How is a confined area defined?

7. The discharge of runoff to surface water from the land application area, due to the application of irrigation water and/or wastewater, is prohibited.

8. The application of process wastewater to a land application area during and up to 24 hours after a storm event is prohibited.

9. Storm event definition is ?

~~9.~~10. The discharge of storm water runoff to surface water from a land application area where manure or wastewater has been applied is prohibited unless the land application area has been managed to prevent runoff consistent with a certified Nutrient Management Plan (NMP) and the manure and/or wastewater has been incorporated into the soil (see Land Application Specification D.4). Conflict with 7 above/

~~10.~~11. The use of manure to construct containment structures or to repair, replace, improve, or raise existing containment structures is prohibited.

~~11.~~12. The backflow of wastewater into production or irrigation wells is prohibited (see General Specification B.12).

~~12.~~13. Standing water in open animal confinement areas (including corrals), feed storage areas, and dry manure storage areas that persists for more than 24 consecutive hours after a storm event is prohibited.

B. GENERAL SPECIFICATIONS

1. The collection, treatment, storage, or disposal of wastes at the CAFO shall not result in: a discharge of waste constituents in a manner which could cause degradation of surface water or groundwater except as allowed by this Order, contamination or pollution of surface water or groundwater, or a condition of nuisance (as defined by the California Water Code Section 13050).

2. A CAFO shall be designed, constructed, operated, and maintained to contain all manure and process wastewater including the runoff and direct precipitation from a 25-year, 24-hour rainfall event (see item 2 of Attachment C).

3. In the Sacramento and San Joaquin River Basins, retention ponds and manured areas (What does this mean? Sensible for retention ponds…..~~W~~would not make sense if it means a field where manure is spread for fertilizer~~?~~ at CAFOs in operation on or before 27 November 1984 shall be protected from inundation or washout by overflow from any stream channel during 20-year peak stream flows. CAFOs that were in operation on or before 27 November 1984 and that are protected against 100-year peak stream flows must continue to provide such protection. CAFOs built or expanded after 27 November 1984 shall be protected against 100-year peak stream flows.

4. In the Tulare Lake Basin, CAFOs that existed as of 25 July 1975 shall be protected from inundation or washout from overflow from any stream channel during 20-year peak stream flows and CAFOs constructed after 25 July 1975 shall be protected from 100-year peak stream flows. CAFOs expanded after 8 December 1984 shall be protected from 100-year peak stream flows.

5. At a minimum, retention ponds must comply with the minimum standards contained in Title 27 CCR Section 22562(d) (i.e., shall be lined with, or underlain by, soils which contains at least ten (10) percent clay and not more than ten (10) percent gravel or artificial materials or materials with equivalent impermeability) and must include additional lining materials necessary to comply with General Specifications B.1 and the groundwater limitations in this Order. This requirement has always been odd. Why not make it performance based, i.e., 10-6 permeability??

6. The level of waste in the wastewater retention ponds shall be kept a minimum of two (2) feet from the top of each aboveground embankment and a minimum of one (1) foot from the ground surface of each belowground pond. Less freeboard may be approved by the Executive Officer when a Civil Engineer who is registered pursuant to California law, or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work, demonstrates that the structural integrity of the pond will be maintained with the proposed freeboard. The pond should be designed/built to hold up to the freeboard, not 2 feet less than it. The "safety factor" volume should be a percentage of the total pond volume and may be more or less than 2 feet. Setting 2 ft from top is arbitrary.

7. Retention ponds shall be managed to prevent breeding of mosquitoes and other vectors. In particular,

   a. An erosion control program shall ensure that small coves and irregularities are not created around the perimeter of the water surface;

   b. Weeds shall be minimized through control of water depth, harvesting, or herbicides; and

c. Manure solids, dead algae, vegetation, and debris shall not accumulate on the water surface.

8. All retention ponds must have a depth marker that clearly indicates the minimum capacity necessary to contain all manure and process wastewater and the runoff and direct precipitation of the 25-year, 24-hour rainfall event as well as normal runoff through manured areas and wastewater generated during the rainy season.

9. All precipitation and surface drainage from outside of the CAFO (i.e., "run on") shall be diverted away from any manured areas (defined as??) unless such drainage is fully contained.

10. All roofs, buildings, and non-manured areas located on the CAFO shall be constructed or otherwise designed so that clean rainwater is diverted away from manure and waste containment facilities, unless such drainage is fully contained.

11. Roof drainage from barns, milk houses, or shelters shall not drain into the corrals unless the corrals are paved and properly drained (Title 3 CCR, Division 2, Chapter 1, Article 22, Section 661).

12. Any connections between water supply and waste streams must be protected by proper installation of an approved backflow prevention device or be properly air-gapped (Title 3 CCR, Division 2, Chapter 1, Article 22, Sections 622 and 665) (see Prohibition A.11).

13. The milk parlor and corrals shall be designed to convey all water that has contacted animal wastes to the wastewater retention system and to minimize the infiltration of water into the underlying soils.

14. Manure and feed storage areas shall be designed and managed to direct leachate and runoff to the wastewater retention system and minimize infiltration of water into underlying soils.

15. The Discharger shall contain all storm water that has contacted manured areas or commingled with process wastewater.

16. Unlined ditches, swales, and/or earthen-berm channels may only be used for temporary control of accidental spills, or rainfall-induced overflows at CAFOs designed, constructed, operated, and maintained in compliance with Prohibition A.2.

17. Salt in animal rations shall be limited to the amount required to maintain animal health and optimum production. Why else would it be added?

18. Dead animals shall be disposed of in accordance with appropriate state and local laws, and regulations. Disposal shall be consistent with Prohibitions A.4.

19. The disposal of manure, process-generated wastewater, or process wastewater to the land application area must be done in a manner that is consistent with a certified NMP. Who will certify the NMP?

C. SURFACE WATER LIMITATIONS

Any discharge of waste at CAFOs shall not cause violations of water quality objectives in the Basin Plans.

D. LAND APPLICATION SPECIFICATIONS

1. Discharge of CAFO wastes, or clean water applied to the land application area shall not cause the underlying groundwater to contain any waste constituent, degradation product of CAFO wastes, or any constituent of soil mobilized by the interactions between applied wastes and soil or soil biota, to exceed the groundwater limitations set forth in this Order.

2. The discharge of waste to any CAFO land application area is subject to the following requirements:

   a. Develop and implement a NMP as specified in Title 40 CFR Section 412.4 and in accordance with Required Reports and Notices I.3 (b) and Attachment C; and

   b. Maintain the records specified in Title 40 CFR Section 412.37 (see Attachment B, which is made part of this Order).

3. The application of manure or process wastewater to cropland shall be consistent with reasonable agronomic loading rates that preclude development of vectors or other nuisance conditions and that will not exceed the amount needed to meet crop demand at the time of application or stage of crop growth considering the crop, soil, climate, irrigation management system, type of manure, and special local conditions.

4. Land application areas that receive dry manure shall be managed to minimize erosion and storm water runoff to surface water. Applied manure shall be incorporated into the soil as soon as practicable, but no later than 48 hours after manure application (see Prohibition A.9).

5. All applied wastewater must infiltrate completely within 24 consecutive hours after application.

6. Process wastewater shall not be applied to land application areas during periods when the soil is at or above field capacity unless consistent with a certified NMP.

E. GROUNDWATER LIMITATIONS

Discharge of waste at the CAFO shall not, itself or in combination with other sources, cause the underlying groundwater to be degraded, to exceed water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

F. PROVISIONS

1. The Discharger shall comply with the *Standard Provisions and Reporting Requirements for NPDES Permits and Waste Discharge Requirements for CAFOs* (Standard Provisions) dated **[date of adoption of Order]**, which is part of this Order.

2. The Discharger shall comply with all applicable provisions of the Clean Water Act, Code of Federal Regulations, California Water Code, Title 27 CCR, and the applicable Water Quality Control Plans that are not specifically referred to in this Order.

3. The Discharger shall comply with the attached Monitoring and Reporting Program No. ____which is part of this Order, and future revisions thereto, or with an individual monitoring and reporting program, as specified by the Executive Officer.

4. The Discharger shall submit a complete Report of Waste Discharge in accordance with the California Water Code Section 13260 at least 180 days prior to any material change or proposed change in the character, location, or volume of the discharge, including any expansion of the facility or development of any treatment technology, or construction of an anaerobic digester.

5. If wastes such as, but not limited to, whey, cannery wastes, septage, sludge, biosolids, and ash are generated onsite or proposed to be brought onto the CAFO facility for the purpose of disposal, the Discharger shall submit a complete Report of Waste Discharge and receive WDRs or a waste-specific waiver of WDRs from the Regional Board prior to receiving this waste.

6. Prior to the use of any new settling, storage, or retention pond not associated with an expansion, the Discharger shall submit a report verifying that the liner meets the requirements of this Order. The report must be prepared and certified by a Civil Engineer who is registered pursuant to California law or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work. Waste shall not be placed into the pond until the Executive Officer notifies the Discharger in writing that the report is acceptable.

7. If plans for animal waste disposal include application to land not under the ownership of the Discharger, the Discharger's NMP shall include this land and the Discharger shall provide to the Executive Officer a copy of a written agreement with the property owner that specifies plans for the use and management of the offsite cropland.

8. Prior to transferring manure or process wastewater to other persons, a Discharger must provide the recipient with the most current nutrient analysis of the material to be conveyed. The nutrient analysis provided must comply with the requirements of the attached Monitoring and Reporting Program. What will the ~~receipent~~recipient do with this? What liability does he/she now assume? Will this be a dis-incentive to taking manure water?

9. If site conditions threaten to violate General Specification B.1, the Discharger shall take immediate action to preclude the violation, documenting the developing condition and all mitigating actions. Such actions shall be summarized in the annual monitoring report. Alterations of the Waste Management Plan (WMP) (see Required Reports and Notices I.3.a) for the production area to avoid a recurrence shall be submitted as a modification to the WMP.

10. If a discharge of waste creates, or threatens to create (in the absence of timely abatement action), significant objectionable odors or nuisance odor and vector conditions, enforcement and/or revocation of coverage under this Order may result.

11. The Discharger shall comply with all requirements of this Order and all terms, conditions, and limitations specified in the discharge authorization letter issued by the Executive Officer.

12. The Discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood to adversely affect human health or the environment.

13. Any instance of noncompliance with this Order constitutes a violation of the Clean Water Act and its regulations and/or of the California Water Code and its regulations. Such noncompliance is grounds for enforcement action, and/or termination of the authorization to discharge.

14. Upon cessation of confined animal operations at the facility, the Discharger must maintain coverage under this Order, a subsequent revision to this Order, or an individual NPDES permit until all manure and animal waste impacted soil, including soil within the retention pond(s), is disposed of or utilized in a manner which does not pose a threat to surface water or groundwater quality or create a condition of nuisance.

15. This Order shall serve as an NPDES General Permit pursuant to Section 402 of the federal Clean Water Act. The general permit shall become effective ten (10) days after the date of its adoption provided the Regional Administrator of USEPA has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

16. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Accordingly, the Discharger shall submit to the Regional Board on or before each report due date the specified document or, if an action is specified, a written report detailing evidence of

compliance with the date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Board by letter when it returns to compliance with the time schedule. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in terminating the applicability of this Order to a specific facility or Discharger.

17. Technical reports required by this Order must be certified by an appropriately licensed professional as required in this Order and its Attachments. Approval of these reports by the Executive Officer is not required. However, if the Executive Officer provides comments on any technical report, the Discharger will be required to address those comments. As a licensed CA Civil PE, I will very rarely, if ever, certify (aka guarantee, warranty, etc) anything, especially if it is out of my control (like a dairymen following a CNP or WMP).

18. The Discharger shall maintain a copy of this Order at the site so as to be available at all times to site-operating personnel. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Order.

G. APPLICATION PROCEDURES AND TIMING

1. Each owner or operator of a CAFO (as defined in Title 40 CFR Section 122.23(b)(2) as revised effective 14 April 2003, and as defined in this Order in Finding 4) shall do one of the following: (1) request enrollment under this Order by submitting to the Regional Board a Notice of Intent (NOI) and the appropriate filing fee which constitutes a complete Report of Waste Discharge (see Attachment A, which is attached to and made part of this Order); (2) request that the Regional Board issue a determination that the CAFO has "no potential to discharge" pursuant to Title 40 CFR Section 122.23(d)(2); or (3) submit a Report of Waste Discharge and a filing fee for individual WDRs. Whichever the CAFO owner or operator chooses to submit must be received by the Regional Board **not later than 45 days after the effective date of this Order**.[1]

2. If the Executive Officer denies a request for a "no potential to discharge" determination, the Discharger shall submit an NOI (Report of Waste Discharge) and a filing fee, which must be received by the Regional Board not later than 30 days after the date of the denial letter or a time schedule determined by the Executive Officer.

3. Upon receipt of a completed NOI to comply with the terms of this Order and with the appropriate filing fee and any other information deemed necessary by the Executive Officer, the Executive Officer will authorize the proposed discharge by transmitting a Notice of Applicability (NOA) to the Discharger. Coverage under this Order is effective

[1] The Regional Board or Executive Officer may require that a particular CAFO file a Report of Waste Discharge for an individual NPDES permit. In the event such a request is received, the applicable due date for submittal of the Report of Waste Discharge will be identified in the request.

on the date of the NOA. The NOA may be terminated or revised by the Executive Officer at any time.

4. The Discharger's authorization to discharge waste under the State Water Resources Control Board General Industrial Storm Water Permit (Order No. 97-03-DWQ) is terminated on the date of the NOA.

5. The Discharger's authorization to discharge waste under Order No. 96-270 (General Waste Discharge Requirements for Milk Cow Dairies) is terminated on the date of the NOA.

6. This Order expires on **(5 years from date of adoption of this Order) _____ 2010**. However, it shall continue in force and effect until a new general permit is issued or a Discharger under this Order is made subject to an individual NPDES permit.

H. PERMIT REOPENING, REVISION, REVOCATION, AND RE-ISSUANCE

1. If more stringent applicable water quality standards are promulgated or approved pursuant to Clean Water Act Section 303, or amendments thereto, the Regional Board will revise and modify this Order in accordance with such standards.
2. This Order may be reopened to address any changes in state or federal plans, policies, or regulations that would affect the quality requirements for the discharges and as authorized by federal and state law.

3. The Regional Board or the Executive Officer may revoke coverage under this Order and require the Discharger to submit a Report of Waste Discharge and obtain an individual NPDES permit.

I. REQUIRED REPORTS AND NOTICES

1. To enroll under this Order, the owner or operator shall submit an NOI (Report of Waste Discharge) and the appropriate filing fee as required in California Water Code Section 13260. At a minimum, the Report of Waste Discharge shall include all the information shown in Attachment A.

2. Dischargers must submit certification as part of the required Waste Management Plan, in accordance with the Schedule of Tasks in K.1, from a County Health or Environmental Officer or a trained professional approved by the County to document that no cross connections exist between the waste management system and the water supply or irrigation supply wells and that appropriate backflow prevention devices are in place.

3. Dischargers must submit the following to document surface water protection in accordance with the Schedule of Tasks K.1:

a. **Waste Management Plan (WMP):** The Discharger shall submit a WMP for the production area, prepared in accordance with Attachment C. The WMP shall provide an evaluation of the CAFO's design, construction, operation, and maintenance of flood protection and waste containment facilities and whether they comply with General Specifications B.1 through B.4 and B.6 through B.18. If the design, construction, operation, and/or maintenance of these facilities do not comply with the noted General Specifications, the WMP must propose modifications to the design, construction, operation, and/or maintenance that will bring these facilities into compliance. The WMP must also include a schedule for the modifications that complies with the Schedule of Tasks K.1. Certification that the modifications have been implemented shall be submitted in accordance with the Schedule of Tasks K.1. Again, a PE certification may be hard to come by.

The registered professional preparing the WMP must certify that each component of the facility design, construction, operation, and maintenance, or the proposed modifications to any of the facility components, will protect surface water quality as required in General Specifications B.1 through B.4 and B.6 through B.18. Groundwater monitoring will be used to determine the effectiveness of the waste management practices to protect groundwater quality. Certification…no thanks.

b. **Nutrient Management Plan (NMP):** A Discharger who applies manure, bedding, or process wastewater to land must develop and implement best management practices (BMPs) as specified in Title 40 CFR Section 412.4, including a NMP. The NMP must be submitted to the Executive Officer and must ultimately provide protection of both surface water and groundwater. The initial NMP to be submitted in accordance with the Schedule of Tasks K.1 below shall incorporate the elements specified in Attachment C and the requirements specified in Title 40 CFR Section 412.4(c)(1)-(c)(5) based on a field-specific assessment of the potential for pollutant transport to surface water. The initial NMP related to the application of wastes at agronomic rates shall be developed and certified by a Professional Soil Scientist, Professional Agronomist, Professional Crop Scientist, or Crop Advisor certified by the American Society of Agronomy or by a Technical Service Provider certified in Nutrient Management California by the National Resource Conservation Service (NRCS). Groundwater monitoring will be used to determine if implementation of the NMP is protective of groundwater quality.

4. The Discharger shall submit a technical report within 30 days of becoming aware of storm water monitoring showing that storm water discharges from the production area contains elevated concentrations of CAFO waste constituents. The technical report shall evaluate the facility to determine pollution source identification for storm water pollution control.

5. Reporting Provisions:

a. All Reports of Waste Discharge, applications, annual reports, or information submitted to the Regional Board shall be signed and certified in accordance with Title 40 CFR Section 122.22 (see C. 7 and C.10 of the Standard Provisions).

b. The Discharger shall submit all reports as specified in the attached Monitoring and Reporting Program.

c. Any Discharger authorized to discharge waste under this Order shall furnish, within a reasonable time, any information the Regional Board or USEPA may request, to determine whether cause exists for modifying, revoking, and reissuing, or terminating their authorization for coverage under this Order. The Discharger shall, upon request, also furnish to the Regional Board copies of records required to be kept by this Order.

d. Except for data determined to be confidential under Clean Water Act Section 308, all reports prepared and submitted to the Executive Officer in accordance with the terms of this Order shall be available for public inspection at the offices of the Regional Water Quality Control Board. As required by the Clean Water Act, monitoring data shall not be considered confidential.

J. RECORD-KEEPING REQUIREMENTS

1. The Discharger shall create, maintain for five years, and make available to the Regional Board upon request by the Executive Officer the following records:

   a. All specific records maintained to document implementation and management of the minimum elements of the NMP as specified in 40 CFR Section 122.42(e)(2)(i)(A) (see Attachment B);

   b. All records for the production area as specified in Title 40 CFR Section 412.37(b) (see Attachment B);

   c. All records for the land application areas as specified in Title 40 CFR Section 412.37(c) (see Attachment B);

   d. A copy of the Discharger's site-specific NMP as specified in 40 CFR Section 122.42(e)(2)(ii); and

   e. The date, recipient name and address, and approximate amount of manure, bedding, or process wastewater transferred to another person as specified in 40 CFR Section 122.42(e)(3) (see Attachment B).

K. SCHEDULE OF TASKS

1. Dischargers who receive coverage under this Order are required to submit the following reports and plans according to the schedule in the table below **[time period begins on effective date of this Order]**:

KA:

Here are some rough estimates on the cost to get this done. Not much (<25%) change from a large dairy to a small one (per the #s on this table)

PLAN/REPORT	DUE DATES[1]		
	CAFO SIZE		
	• 3,000+ mature dairy cows	• 1,500 to 2,999 mature dairy cows	• 700 to 1,499 mature dairy cows
WMP $5K	**6 months**	**12 months**	**18 months**
NMP[2] $10-20K	**12 months**	**18 months**	**31 December 2006**
WMP Certification $10K	**18 months**	**24 months**	**30 months**
Storm Water Monitoring Assessment[3] $~~10~~5K	**24 months**	**24 months**	**24 months**

[1] Except where otherwise noted, all due dates are the date the report must be received by the Regional Board.
[2] The NMP must be developed and implemented by the submittal date. Initially, the NMP must be submitted to the Executive Officer. A copy of the most recent NMP shall be kept on site and submitted to the Executive Officer upon request.
[3] The Storm Water Monitoring Assessment is described in MRP No.___.

2. Dischargers (as identified in the Fact Sheet) required to conduct groundwater monitoring shall submit a Monitoring Well Installation Plan (MWIP) and a Monitoring Well Installation Completion Report (MWICR) as required in MRP No.____, according to the schedule in the table below **[time period begins on effective date of this Order]**.

PLAN/REPORT	DUE DATES			
	CAFO Size			
	• 3,000+ mature dairy cows	• 2,250 to 2,999 mature dairy cows	• 1,500 to 2,249 mature dairy cows	• 1,300 to 1,499 mature dairy cows
MWIP $25K	**6 months**	**18 months**	**30 months**	**42 months**
MWICR $5K	**12 months**	**24 months**	**36 months**	**48 months**

3. If changes are made to the required submittals through Regional Board review, those changes shall be implemented.

4. If a request for a "no potential to discharge" determination is denied by the Executive Officer, as stated in G.2 above, the Discharger shall submit a filing fee and an NOI for coverage under this general NPDES permit or a Report of Waste Discharge for coverage under an individual NPDES permit. The Regional Board must receive the Report of Waste

Discharge **not later than 30 days after the date of the denial letter**. The reports and plans required in Required Reports and Notices I.3 and the MWIP and MWICR required in K.2 shall be submitted 120 days after the deadlines in the table above, except that the NMP for all facilities will be due no later than **31 December 2006** to comply with the federal regulations.

This Order will apply to those CAFOs that submit an NOI in compliance with this Order and after the CAFO receives a "Notice of Applicability" from the Executive Officer.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on _____.

_____
THOMAS R. PINKOS, Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO._____

GENERAL ORDER

FOR
EXISTING CONCENTRATED ANIMAL FEEDING OPERATIONS (MILK COW DAIRIES)

This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code (CWC) Section 13267. The Discharger shall not implement any changes to this MRP unless a revised MRP is issued by the Executive Officer. For purposes of evaluating compliance with Order No. _____, the Discharger shall conduct monitoring and reporting as specified below.

A. MONITORING PROVISIONS

Inspections

The results of all inspections described below shall be **recorded** and the records shall be maintained on-site for a period of five years.

1. The Discharger shall inspect the production area **weekly** including all waste holding areas and note any changes that could result in discharges from property under the control of the Discharger.

2. **Monthly** and during each significant storm event[1], the Discharger shall make visual inspections of all storm water containment structures. These structures shall be inspected for discharge, freeboard, berm integrity, cracking, slumping, excess vegetation, burrowing animals, and seepage.

3. Freeboard shall be measured **weekly** within each liquid manure storage structure using a depth marker. Freeboard shall be the vertical distance from the pond surface to the lowest elevation of the surrounding berm or the bottom of the spillway and shall be measured to the nearest 0.1 foot.

This is a lot of monitoring and paperwork management. Suggest management by exception and look frequently at problem areas and less frequently at other areas.

Manure and Process Wastewater Monitoring

4. The Discharger shall monitor all wastes produced at the facility including process wastewater and manure. Sufficient monitoring shall be performed to determine the nutritive and salt content of process wastewater and manure separately. Manure must be analyzed at least once annually for nitrogen and phosphorus content. Process wastewater samples shall be collected at the discharge location, prior to any dilution

1 A significant storm event is defined as a storm event that results in continuous discharge of storm water (from where??) for a minimum of one hour, or intermittent discharge of storm water for a minimum of three hours in a 12-hour period.

or addition of irrigation water, and shall be representative of the process wastewater applied to the cropland. Monitoring shall include, at a minimum, the following:

Constituent	Units	Type of Sample	Minimum Sampling Frequency
Flow (wastewater)	acre-feet/day	Measurement	Each Event[1]
Weight[2] (manure)	tons	Measurement	Each Event
Nitrate (N)	mg/l or mg/kg[3]	Composite[4]	Each Event
Ammonia (N)	mg/l or mg/kg	Composite	Each Event
Total Kjeldahl Nitrogen	mg/l or mg/kg	Composite	Each Event
Phosphorus	mg/l or mg/kg	Composite	Each Event
Total Dissolved Solids	mg/l or mg/kg	Composite	Each Event
Electrical Conductivity	umhos/cm	Composite	Each Event
pH	pH units	Composite	Each Event
General Minerals[5]	mg/l or mg/kg	Composite	Each Event

[1] Flow and wastewater constituents shall be measured to gauge the hydraulic and nutrient application to the cropland during **each** irrigation event. This is ridiculous. Too frequent. Establish a baseline with some early testing (1x/week of a summer) and then taper to 1/mo from then on. Nutrient loading is to be consistent with the uptake capacity for the crop during the growing season. The wastewater application dates, total acre-feet of wastewater applied to each field, and concentrations of wastewater constituents shall be recorded for each application.

[2] Shall include moisture content.

[3] Units are milligrams per liter (mg/l) for liquids and milligrams per kilogram (mg/kg) for solids.

[4] A representative composite sample shall be prepared based on a minimum of three time-series samples collected during an irrigation event that are representative of the beginning, middle, and end of the wastewater discharge. No need to do this if the pond is homogeneous (like when aerated) Due to the stratification of ponds, a time-series composite is needed so that representative nutrient loading rates may be calculated. A time series composite is not going to address changes due to stratification unless the pond is significantly emptied.

[5] General minerals include calcium, magnesium, sodium, potassium, bicarbonate, carbonate, sulfate, and chloride reported individually.

Monitoring results, including all laboratory reports, shall be included in the Annual Monitoring Report.

Soil Monitoring

5. At least once every five years, commencing with the first full calendar year regulated by Order No. _____, the Discharger shall collect and analyze representative soil samples for phosphorus, nitrate, ammonia, and total Kjeldahl nitrogen content from all fields where process wastewater, manure, or other process wastes will be applied The concentration of these nutrients varies all over the place dependent on crop,

irrigation and rain, fertilizer inputs, etc. To make it meaningful, it needs to be done more frequently than 1x/ 5 years. Monitoring results, including all laboratory reports, shall be included in the Annual Monitoring Report. Soil samples shall be collected and analyzed in accordance with the protocols identified pursuant to item 6 of Attachment C of Order No. ____.

Discharge and Surface Water Monitoring

6. The Discharger shall record the date and the approximate time and volume of each discharge or storm-related discharge that results in off-property discharges of wastes or storm water that has commingled with process wastewater or manure, and the approximate duration and amount of wastes discharged. Such discharges shall be reported in accordance with Reporting Requirement B.1 or B.2 below as appropriate.

7. During or immediately after any overflow or other discharge of pollutants from a manure or process wastewater storage, retention pond, or land application area, whether or not authorized by this permit, the Discharger shall collect samples of the discharge and, if the discharge is to surface water or a tributary to surface water, surface water upstream and downstream of the discharge. The Discharger shall record the estimated volume of the discharge and the date and time of the discharge. Field measurements and laboratory analyses of these samples shall include the following (as noted in the 31 December 2003 USEPA *NPDES Permit Writer's Guidance Manual and Example NPDES Permit for Concentrated Animal Feeding Operations* to comply with Title 40 CFR requirements for all NPDES):

Constituent	Units	Type of Sample	Frequency
Volume	Gallons	Estimate	Daily
Temperature	Degrees	Grab - Field	Daily
pH	pH units	Grab - Field	Daily
Electrical Conductivity	μmhos/cm	Grab - Field	Daily
BOD_5[1]	mg/l	Grab - Laboratory	Daily
Total Suspended Solids	mg/l	Grab - Laboratory	Daily
Total Coliform	MPN/100 ml [2]	Grab - Laboratory	Daily
Fecal Coliform	MPN/100 ml [2]	Grab - Laboratory	Daily
Ammonia-nitrogen (unionized)	mg/l	Grab - Laboratory	Daily
Nitrate-nitrogen	mg/l	Grab - Laboratory	Daily
Kjeldahl-nitrogen	mg/l	Grab - Laboratory	Daily
Phosphorus	mg/l	Grab - Laboratory	Daily
Total Dissolved Solids	mg/l	Grab - Laboratory	Daily

_____

[1] Five-day Biochemical Oxygen Demand
[2] Five dilutions minimum

Assuming that this is required for each land application for purposes of fertilization, this is WAY to frequent and very expensive. Estimate that this is approx $200/sample. Coliform is a fast turnaround time (<8 hrs) from time of collection to time of analysis, making this virtually an impossible analysis to do in some places in CA.

Note: If conditions are not safe for sampling, the Discharger must provide documentation of why samples could not be collected and analyzed. For example, the Discharger may be unable to collect samples during dangerous weather conditions (such as local flooding, high winds, tornados, electrical storms, etc.). However, once the dangerous conditions have passed, the Discharger shall collect a sample from the waste management unit from which the discharge occurred.

Storm Water Monitoring

8. During the first two years of the term of Order No.___, the Discharger shall characterize the quality of storm water by conducting the following monitoring for any discharges of storm water from the production area to surface water:

   a. Collect and analyze grab samples of discharges of storm water from (where?…a point leaving the CAFO??) at least two storm events per wet season. The first sample should be from the first storm of the wet season that produces significant storm water discharge (defined as what ?) and the second from a midseason storm that is preceded by at least three days of dry weather. The sample(s) should be taken during the first thirty minutes of the discharge. Samples must be representative of the quality and quantity of storm water discharged. The samples shall be analyzed for:

Constituents	Units	Station [1]	Sampling Frequency
Flow	Gallons/Date	TBA	Per Storm[2]
Temperature	°F	TBA	Per Storm
BOD	mg/l	TBA	Per Storm
Ammonia	mg/l	TBA	Per Storm
Total Kjeldahl Nitrogen	mg/l	TBA	Per Storm
Nitrate	mg/l	TBA	Per Storm
Total Dissolved Solids	mg/l	TBA	Per Storm
Electrical Conductivity	µmhos/cm	TBA	Per Storm

Constituents	Units	Station [1]	Sampling Frequency
Turbidity	NTU	TBA	Per Storm
Rainfall	inches	TBA	Per Storm

[1] To be announced by the Discharger

[2] The Discharger shall sample two storms during the wet season where runoff occurs . This footnote should apply to the ENTIRE table….otherwise, this is too frequent and as a result costly

b. Conduct an annual inspection of the CAFO to identify areas contributing pollutants to discharges of storm water associated with the CAFO and to evaluate whether measures to reduce pollutant loadings are adequate and properly implemented or whether additional controls are needed. A record of the annual inspection must include the date, the individual(s) who performed the inspection, and their observations.

c. No less than twice during the dry season (May through September), observe and/or test for the presence of non-storm water discharges at **all** storm water discharge locations This is ridiculous…..every place a field drains off site? Should be representative. At a minimum, a visual inspection shall be conducted to determine the presence of stains, odors, debris, or other conditions that may indicate a discharge.

d. Conduct wet season (October through April) observation of **all** storm water locations during the first hour of the first storm event of the wet season (how can you see all locations ? This is unrealistic. Should be "representative". that produces significant storm water discharge (continuous discharge of storm water for one hour or more) to observe the presence of floating and suspended materials, discolorations, turbidity, odor, etc.

e. Report any event (i.e., overflows, spills, or leaks) during the year that could contribute pollutants to storm water runoff and modify the sampling plan for the most probable constituents expected.

f. Record observations made under 8.b, 8.c, and 8.d above and include the observation results in the **annual storm water report**. Another report.

g. Provide documentation in the annual storm water monitoring report same as above ?(required in the Reporting Requirement B.5 below) if no significant discharges of storm water occur or if unable to collect any of the required samples or perform visual observations due to adverse climatic conditions.

Groundwater Monitoring

9. Quarterly monitoring of first encountered groundwater will be used to determine compliance with the groundwater limitations of Order No.___. Those Dischargers required to install monitoring wells in Order No.___ shall install sufficient monitoring wells to characterize groundwater flow direction and gradient beneath the site and natural background (unaffected by the Discharger or others…this is a huge presumption……whether it is the discharger or another dairymen, the gw conditions are historic……no way to determine who is responsible) groundwater quality upgradient of the facility and groundwater quality downgradient of the corrals, retention ponds, and land application areas. It may be necessary to install more than one upgradient monitoring well (i.e., for the production area and the land application area). The Executive Officer may require more extensive monitoring based on site-specific conditions. Monitoring shall include measurement of the depth to groundwater to the nearest 0.010 foot in each monitoring well, sample collection from all wells, and analysis of the samples for total coliform (MPN/100 ml), iron (mg/l), manganese (mg/l) and the same constituents that Monitoring Provision A.4 above requires for process wastewater.

   A sufficient number of water supply wells shall also be included in the monitoring program to characterize the quality of water being used at the site.

10. The Executive Officer may require groundwater monitoring at CAFOs other than those specified in Order No.___ at any time. Such requirement may occur, for instance, if violations of this Order are documented and/or the CAFO is located in a high-risk area, i.e., where a sole-source aquifer is, or may be, impacted.

11. Prior to installation of monitoring wells, a Monitoring Well Installation Plan (MWIP) and schedule prepared under the direct supervision of, and certified by, a California registered civil engineer or geologist with experience in hydrogeology shall be submitted to the Executive Officer according to the Schedule of Task K.2 in Order No. ____. In addition to making the certification required in General Reporting Requirements C.10 of the Standard Provisions and Reporting requirements of Order No. ___, the registered professional preparing this report must make the following certification:

    "I certify under penalty of law that the monitoring well network proposed in this Monitoring Well Installation Plan is designed to provide early detection of impacts by CAFO facilities and operations on the quality of first encountered groundwater downgradient of the corrals, retention ponds, and land application areas and to characterize natural background water quality (unaffected by the Discharger or other discharges)."

    Unless we can use radiolabeled isotopes, I will NOT sign this. No way for me to determine if the MW design can differentiate between Discharger or other discharges.

12. All monitoring wells shall be constructed in compliance with Standard Provisions B.24 and B.25 of the Standard Provisions and Reporting Requirements (SPRR), which are attached to Order No.___. The destruction of any monitoring wells or groundwater supply well shall be in compliance with Standard Provision B.24 of the SPRR.

13. Dischargers shall submit to the Executive Officer a Monitoring Well Installation Completion Report (MWICR) prepared under the direct supervision of, and certified by, a California registered civil engineer or geologist with experience in hydrogeology in accordance with the Schedule of Tasks K.2 in Order No. _____. In addition to making the certification required in General Reporting Requirements C.10 of the Standard Provisions and Reporting requirements of Order No. ___, the registered professional preparing this report must make the following certification:

    "I certify that the monitoring well installation network for this CAFO will provide early detection of impacts by this CAFO on the quality of first encountered groundwater downgradient of the corrals, retention ponds, and land application areas and that it is sufficient to characterize natural background groundwater quality (unaffected by the Discharger or other discharges)."

    If the registered professional evaluating the initial data cannot make the above certification without data from additional wells, additional wells (additional may never allow for this determination to be reached…..) shall be installed until the registered professional can make this certification.

Operation and Maintenance

14. The Discharger(s) shall keep operation and maintenance records of activities conducted as part of the process wastewater and manure solids management at the facility. The Discharger(s) shall inspect any cropland on which process wastewater is applied **daily** during each irrigation event, and **shall make records** of those inspections Lots of paperwork….value = ?. The operation and maintenance records shall include the following.

    a. Conditions of process wastewater and settling pond levees, and cropland berms, including rodent holes, piping, and bank erosion;

    b. Descriptions of erosion, field saturation, runoff, or the presence of nuisance conditions in the cropland;

    c. Dates, location, and approximate volume of process wastewater irrigation;

    d. Dates, location, and approximate weight and moisture content of manure application to cropland;

e. Weather conditions at the time of and 24 hours prior to and following waste application;

f. Identification of crop, acreage, and dates of planting, and harvest;

g. Steps and dates steps taken to correct unauthorized releases as reported in accordance with Reporting Requirement B.1 or B.2 below as appropriate;

h. Dates and descriptions of maintenance activities associated with levee or berm repair; and

i. Each manure hauling event on a Manure Tracking Manifest form (Attachment E), which requires information on the manure hauler, destination of manure, dates hauled, and amount hauled, as well as certification. This is ridiculous. If the CNP is prepared and signed by a licensed professional, and is followed, then this is complete overkill.

The Discharger shall provide the information in c, d, e, f, g, and i above in each Annual Monitoring Report.

Record-Keeping Requirements

15. Dischargers shall maintain on-site for a period of five years all information required in Title 40 Code of Federal Regulations (CFR) Section 412.37(b) for the production area and in Section 412.37(c) for the land application area (see Attachment B of Order No.___). Such information includes, but is not limited to, analyses of manure, process wastewater, and soil sampling. Analyses of discharges, surface water, storm water, and groundwater shall also be maintained on-site for a period of five years.

General Monitoring Requirements

16. The Discharger shall comply with all the "Requirements Specifically for Monitoring Programs and Monitoring Reports" as specified in the Standard Provisions and Reporting Requirements.

17. All analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services. All laboratory analyses shall be conducted in accordance with the Title 40 CFR Part 136 (*Guidelines Establishing Test Procedures for the Analysis of Pollutants*) or other test methods approved by the Regional Board.

B. REPORTING REQUIREMENTS

Noncompliance Reporting

1. The Discharger shall report any noncompliance that endangers human health or the environment or any noncompliance with the Prohibitions A.1, A.2, A.3, A.5, A.7, A.8, and A.9 in Order No. ____, within 24 hours of becoming aware of its occurrence. The incident shall be reported to the Regional Board Office, local environmental health department, and to the California Office of Emergency Services (OES). During non-business hours, the Discharger shall leave a message on the Regional Board's voice mail. The message shall include the time, date, place, and nature of the noncompliance, the name and number of the reporting person, and shall be recorded in writing by the Discharger. The OES is operational 24 hours a day. A written report shall be submitted to the Regional Board office within five (5) business days of the Discharger becoming aware of the incident. The report shall contain a description of the noncompliance, its causes, duration, and the actual or anticipated time for achieving compliance. The report shall include complete details of the steps that the Discharger has taken or intends to take, in order to prevent recurrence. All intentional or accidental spills shall be reported as required by this provision. The written submission shall contain:

   a. The approximate date, time, and location of the noncompliance;

   b. A description of the noncompliance and its cause;

   c. The flow rate, volume, and duration of any discharge involved in the noncompliance;

   d. The amount of precipitation (in inches) the day of the discharge and for each of the seven days preceding the discharge;

   e. A description (location; date and time collected; field measurements of pH, temperature, and electrical conductivity; sample identification; date submitted to laboratory; analyses requested) of noncompliance discharge samples and/or surface water samples taken upstream and downstream of the point of noncompliance discharge. The analyses required are specified in Monitoring Provision A.7.

   f. The period of noncompliance, including dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and

   g. A time schedule and a plan to implement corrective actions necessary to prevent the recurrence of such noncompliance.

   The laboratory analyses of the noncompliance discharge sample and/or upstream and downstream surface water samples shall be submitted to the Regional Board office within 45 days of the discharge.

Discharge and Surface Water Reporting

2. The Discharger shall report any discharge from the production area or the land application area, whether authorized or not, within twenty-four hours of becoming aware of the discharge. The incident shall be reported to the Regional Board. During non-business hours, the Discharger shall leave a message on the Regional Board's voice mail. The message shall include the time, date, and place of the discharge, the name and phone number of the reporting person, and shall be recorded in writing by the Discharger. A written report shall be submitted to the Regional Board office within five (5) business days of the Discharger becoming aware of the incident. The report shall include:

   a. The approximate date, time, location, and cause of the discharge, including a description of the flow path to any receiving water body;

   b. The estimated flow rate, volume, and duration of the discharge;

   c. The amount of precipitation (in inches) the day of the discharge and for each of the seven days preceding the discharge;

   d. A description (location; date and time collected; field measurements of pH, temperature, and electrical conductivity; sample identification; date submitted to laboratory; analyses requested) of discharge samples and surface water samples taken upstream and downstream of the point of discharge if the discharge was to surface water. The analyses and provisions required are specified in Monitoring Provision A.7.

   The laboratory analyses of the discharge sample and/or upstream and downstream surface water samples shall be submitted to the Regional Board office within 45 days of the discharge.

Annual Reporting

3. By **1 February** of each year, an annual monitoring report for the previous year shall be submitted to the Executive Officer. The annual report shall be completed on an annual report form provided by the Executive Officer (available on the Regional Board website) and shall include all the information required in Title 40 CFR Section 122.42(e)(4) as specified below.

   a. Number and type of animals, whether in open confinement or housed under roof;

   b. Estimated amount of total manure and process wastewater generated by the CAFO in the previous 12 months (tons/gallons);

   c. Estimated amount of total manure and process wastewater transferred to other persons by the CAFO in the previous 12 months (tons/gallons);

d. Estimated amount of each type of chemical used in the production area in the previous 12 months;

e. Total number of acres and the Assessor Parcel Numbers (why is this needed….overkill) for land application covered by the nutrient management plan;

f. Total number of acres and the Assessor Parcel Numbers (why is this needed….overkill) under control of the CAFO that were used for land application of manure and process wastewater in the previous 12 months;

g. Summary of all manure and process wastewater discharges from the production area that have occurred in the previous 12 months, including date, time, and approximate volume; and

h. A statement indicating whether the current version of the CAFO's nutrient management plan was developed or approved by a certified nutrient management planner as specified in the Required Reports and Notices I.3.b of Order No. ____.

The annual report shall also include: copies of all manure tracking manifests for the reporting period; copies of all laboratory analyses of manure and process wastewater, soil, discharges, surface water, and storm water; and all other information required in Monitoring Provision A.14.c, d, e, f, g, and i above.

Groundwater Reporting

4. The Discharger shall report the results of all groundwater monitoring semi-annually. The groundwater monitoring reports shall be submitted by **1 February** and **1 August** of each year and shall include all laboratory analyses and tabular and graphical summaries of the monitoring data. Data shall be tabulated to clearly show the sample dates, constituents analyzed, constituent concentrations, detection limits, depth to groundwater, and groundwater elevations. Graphical summaries of groundwater gradients and flow directions shall also be included. Each groundwater monitoring report shall include a summary data table of all historical and current groundwater elevations and analytical results. The groundwater monitoring reports shall be certified by a California registered professional as specified in General Reporting Requirements C.8 of the Standard Provisions and Reporting Requirements of Order No. ____.

Storm Water Reporting

5. The Discharger shall submit an annual report by **1 October** of each year which details the Discharger's preparation for the upcoming wet season. The annual report shall include the results (including the laboratory analyses) of all samples of storm water, inspections and observations required in Monitoring Provisions A.8.a – g above, a summary of events during the year that contributed pollutants to storm water runoff

as required in Monitoring Provisions A.8.e above, and any modifications made to the facility or sampling plan in response to pollutants detected in storm water.

6. The 1 October 200__ **[the second year storm water report]** storm water report shall include an assessment of the first two years of storm water monitoring. If the first two years of storm water monitoring indicates pollutants have not been detected in storm water samples, the Discharger may propose to the Executive Officer to discontinue storm water monitoring.

General Reporting Requirements

7. Prior to transferring manure or process wastewater to other persons, Dischargers must provide the recipient of the manure or process wastewater with the most current nutrient analysis (required in Monitoring Provisions A. 4 above).

8. The results of any monitoring conducted more frequently than required at the locations specified herein shall be reported to the Regional Board.

9. Each report shall be signed by the Discharger or a duly authorized representative as specified in the General Reporting Requirements C.7 of the Standard Provisions and Reporting Requirements (SPRR), and shall contain the following statement:

   "*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*"

10. For facilities in Fresno, Kern, Kings, Madera, Mariposa, and Tulare counties, submit reports to:

    California Regional Water Quality Control Board
    Central Valley Region
    1685 E Street
    Fresno, CA 93706
    Attention: Confined Animal Regulatory Unit

    For facilities in Butte, Lassen, Modoc, Plumas, Tehama, and Shasta counties, submit reports to:

    California Regional Water Quality Control Board
    Central Valley Region
    415 Knollcrest Drive, Suite 100

Redding, CA 96002
Attention: Confined Animal Regulatory Unit

For facilities in all other counties, submit reports to:

California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114
Attention: Confined Animal Regulatory Unit

ORDERED BY: _____
THOMAS R. PINKOS, Executive Officer

_____
Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

STANDARD PROVISIONS AND REPORTING REQUIREMENTS
FOR
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT
AND
WASTE DISCHARGE REQUIREMENTS GENERAL ORDER
FOR
EXISTING CONCENTRATED ANIMAL FEEDING OPERATIONS (MILK COW DAIRIES)

__ ____ 2004

A. Introduction:

1. These Standard Provisions and Reporting Requirements (SPRR) are applicable to concentrated animal feeding operations (CAFOs) that are regulated pursuant to the provisions of Title 27 California Code of Regulations (CCR) Division 2, Subdivision 1, Chapter 7, Subchapter 2, Sections 22560 et seq., and Title 40 Code of Federal Regulations (CFR) Parts 122, 123, and 412.

2. Any violation of the Order constitutes a violation of the Federal Clean Water Act and the California Water Code and, therefore, may result in enforcement action under either or both laws.

3. If there is any conflicting or contradictory language between the Order, the Monitoring and Reporting Program (MRP) associated with the Order, or the SPRR, then language in the Order shall govern over either the MRP or the SPRR, and language in the MRP shall govern over the SPRR.

B. Standard Provisions:

1. The requirements prescribed in the Order do not authorize the commission of any act causing injury to the property of another, or protect the Discharger from liabilities under federal, state, or local laws.

2. The Discharger shall comply with all federal, state, county, and local laws and regulations pertaining to the discharge of wastes from the facility that are no less stringent than the requirements of the Order.

3. All discharges from the facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or to other courses under their jurisdiction that are no less stringent than the requirements of the Order.

4. The Order does not convey any property rights or exclusive privileges.

5. In accordance with California Water Code Section 13263(g), "*No discharge of waste into the waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights.*"

6. The provisions of the Order are severable. If any provision of the Order is held invalid, the remainder of the Order shall not be affected.

7. The Discharger shall take all reasonable steps to minimize any adverse impact to the waters of the State resulting from noncompliance with the Order. Such steps shall include accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliance.

8. The fact that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the Order shall not be a defense for violations of the Order by the Discharger.

9. The filing of a request by the Discharger for modification, revocation and reissuance, or termination of the Order, or notification of planned changes or anticipated noncompliance, does not stay any condition of the Order.

10. The Order is not transferable to any person except after notice to the Regional Board. The Regional Board may modify or revoke and reissue the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the Clean Water Act or California Water Code.

11. The Discharger shall provide to the Executive Officer, within a reasonable time, any information which the Executive Officer may request to determine whether cause exists for modifying, revoking, and reissuing, or terminating the Discharger's coverage under the Order or to determine compliance with the Order. The Discharger shall also provide to the Executive Officer upon request, copies of records required to be kept by the Order.

12. After notice and opportunity for a hearing, the Order may be terminated or modified for cause, including but not limited to:

    a. Violation of any term or condition contained in the Order;

    b. Obtaining the Order by misrepresentation, or failure to disclose fully all relevant facts;

    c. A change in any condition that results in either a temporary or permanent need to reduce or eliminate the authorized discharge; or

    d. A material change in the character, location, or volume of discharge.

13. The Order may be modified if new federal or state statutes or regulations are promulgated, and if more stringent applicable water quality standards are approved pursuant to Part 303 of

the Clean Water Act, or Title 27 of the CCR, or as adopted into the Regional Board *Water Quality Control Plans* (Basin Plans) *for the Sacramento River and San Joaquin River Basins (4th Ed), and for the Tulare Lake Basin (2nd Ed.).* The Order may also be modified for incorporation of land application plans, and/or changes in the waste application to cropland.

14. The Regional Board may review and revise the Order at any time upon application of any affected person or by motion of the Regional Board.

15. The Discharger shall ensure compliance with existing and or future promulgated standards for discharge.

16. The Discharger shall permit representatives of the Regional Board and the State Water Resources Control Board (State Board), upon presentations of credentials at reasonable hours, to:

    a. Enter premises where wastes are treated, stored, or disposed and where any records required by the Order are kept;

    b. Copy any records required to be kept under terms and conditions of the Order;

    c. Inspect facilities, equipment (monitoring and control), practices, or operations regulated or required by the Order; and

    d. Sample, photograph, and/or video tape any discharge, waste, waste management unit, or monitoring device.

17. The Discharger shall properly operate and maintain in good working order any facility, unit, system, or monitoring device installed to achieve compliance with the Order. Proper operation and maintenance includes best practicable treatment and controls, and the appropriate quality assurance procedures.

18. Animal waste storage areas and containment structures shall be designed, constructed, and maintained to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, overtopping, by-pass, and overflow.

19. Ponds that are used for wastewater and are lined shall be designed under the direct supervision of a qualified professional. Designs shall include a Construction Quality Assurance Plan, the purpose of which is to ensure that the pond is constructed to comply with applicable sections of Title 27 CCR, Division 2, Chapter 7, Subchapter 2, and any more stringent requirements of the Order. Any county or local standards for pond construction and installation more stringent than those contained in Title 27, shall be implemented by the Discharger.

20. Materials used to construct pond liners shall have appropriate physical and chemical properties to ensure containment over the operating life of the pond. Much better than the 10% clay rule.
21. Prior to removal of solids from any lined pond used for wastewater, a qualified professional shall provide written procedures intended to ensure that the pond liner is not damaged when the solids are removed.

22. Setbacks or separation distances contained under Water Wells, Section 8, Part II, in the *California Well Standards, Supplemental Bulletin 74-90 (June 1991)*, and *Bulletin 94-81 (December 1981),* California Department of Water Resources (DWR), shall be maintained for the installation of all groundwater supply wells at new or existing CAFOs. A setback of 100 feet from existing supply wells shall be required for the installation of all manured areas in the production area at new CAFOs. A minimum setback of 25 feet, or other control structures (such as housing, berming, grading), shall be required for the protection of existing wells or new wells installed in the cropland. If a county or local agency adopts more stringent setback standards than that adopted by the DWR, then these local standards shall supercede the Well Standards of DWR, and the Discharger shall comply with the more stringent standards.

23. Setbacks or other compliance alternatives as specified in Title 40 CFR, Part 412.4(c)(5) shall be maintained for the application of manure and process wastewater. Manure and process wastewater shall not be applied closer than 100 feet to any downgradient surface waters, open tile line intake structures, sinkholes, agricultural well heads, or other conduits to surface waters, unless a 35-foot wide vegetated buffer is substituted for the 100-foot setback or alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions achieved by the 100-foot setback. This seems pretty arbitrary….I would rely on the "or alternative conservation practices" language.

24. The construction and destruction of groundwater supply and monitoring wells, as identified in the standards under *Water Wells* and *Monitoring Wells* in the *California Well Standards Bulletin 74-90 (June 1991)* and *Bulletin 94-81 (December 1981)*, shall be required for new and existing CAFOs. Should any county or local agency adopt more stringent standards than that adopted by the DWR, then these local standards shall supercede the Well Standards of DWR, and the Discharger shall comply with the more stringent standards.

25. All monitoring wells shall be constructed in a manner that maintains the integrity of the monitoring well bore hole and prevents the well from acting as a conduit for pollutant/contaminant transport. The sampling interval of each monitoring well shall be appropriately screened and fitted with an appropriate filter pack to enable collection of representative groundwater samples.

26. Following any storm event that causes the freeboard of any wastewater holding pond to be less than 1-foot for below-grade ponds, or 2-feet for above-grade ponds, the Discharger shall take action as soon as possible to provide the appropriate freeboard in the wastewater holding pond. See comments in the WDR general order.

27. Safeguards against electric power failure shall be:

    a. Provided by the Discharger to assure that the facility will remain in compliance with the terms and conditions of the Order, should there be reduction, loss, or failure of electric power. Safeguards may include standby generators, alternate power sources, standby pumps, additional storage capacity, or modified operating procedures.

    b. Subject to the approval of the Executive Officer, and upon request by the Executive Officer, a written description of safeguards shall be provided.

    c. Provided by the Discharger, should the Regional Board advise the Discharger in writing that the safeguards are inadequate. Within 90 days of such notification, the Discharger shall identify a schedule for providing safeguards that, in the event of reduction, loss, or failure of electric power, enable the Discharger to comply with the terms and conditions of the Order. The schedule of compliance shall, upon approval of the Regional Board, become a condition of the Order.

C. General Reporting Requirements:

1. The Discharger shall give advance notice to the Regional Board of any planned changes in the ownership of the facility, or of any planned changes in the waste management activities at the facility that may result in noncompliance with the Order.

2. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of the Order by letter, a copy of which shall be immediately forwarded to the appropriate Regional Board office listed below in the General Reporting Requirements C.11.

3. To assume operation under the Order, any succeeding owner or operator must request, in writing, that the Executive Officer transfer coverage under the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, address and telephone number of the persons responsible for contact with the Regional Board and a responsibility statement. The statement shall comply with the signatory paragraph of the General Reporting Requirement C.7 below and state that the new owner or operator assumes full responsibility for compliance with the Order and that the new owner or operator will implement the Waste Management Plan prepared by the preceding owner or operator. Transfer of the Order shall be approved or disapproved in writing by the Executive Officer. The succeeding owner or operator is not authorized to discharge under the Order and is subject to enforcement until the date of the writing whereby the Executive Officer transfers coverage.

4. The Executive Officer may require the Discharger to submit technical reports pursuant to the Order and Section 13267 of the California Water Code.

5. The Discharger shall identify any information that may be considered to be confidential under state and federal law and not subject to disclosure under the Public Records Act. The Discharger shall identify the basis for confidentiality. If the Executive Officer cannot identify a reasonable basis for treating the information as confidential, the information will be placed in the public file and the Discharger will be notified. Otherwise, if the Executive Officer receives a request for the information claimed confidential, the Executive Officer will notify the Discharger that the information will be placed in the public file unless the Regional Board receives, within 10 calendar days, a written request from the Discharger to keep the information confidential containing a satisfactory explanation supporting the information's confidentiality.

6. Except for data determined to be exempt from disclosure under the Public Records Act (California Government Code Sections 6275 to 6276), and data determined to be confidential under Section 13267(b)(2) of the California Water Code, all reports prepared in accordance with the Order and submitted to the Executive Officer shall be available for public inspection at the offices of the Regional Board. Data on waste discharges, water quality, meteorology, geology, and hydrogeology shall not be considered confidential.

7. All technical reports and monitoring program reports shall be signed by a person identified below:

   a. For a sole proprietorship: by the proprietor;

   b. For a partnership: by a general partner;

   c. For a corporation: by a principal executive officer of at least the level of senior vice-president; or

   d. A duly authorized representative if:

      (1) The authorization is made in writing by a person described in Subsection a, b, or c of this provision;

      (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the facility, such as the position of manager. A duly authorized representative may thus be either a named individual or an individual occupying a named position; and

      (3) The written authorization is submitted to the Regional Board.

8. All technical reports required in the Order that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by, or under the direction of, and signed by persons registered to practice in California pursuant to California Business and Professions Code, Sections 6735,

7835, and 7835.1. To demonstrate compliance with Title 16 CCR, Sections 415 and 3065, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

9. The Discharger shall file a Report of Waste Discharge with the Regional Board at least 180 days before making any material change in the character, location, or volume of the discharge. A material change includes, but is not limited to, the following:

   a. The addition of a new wastewater that results in a change in the character of the waste;

   b. Significantly changing the disposal method or location;

   c. Significantly changing the method of treatment; and/or

   d. Increasing the discharge flow beyond that specified in the Order.

10. Each person signing a report required by the Order or other information requested by the Regional Board shall make the following certification:

    "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. All reports shall be submitted to the following address:

    For facilities in Fresno, Kern, Kings, Madera, Mariposa, and Tulare counties, submit reports to:

    California Regional Water Quality Control Board
    Central Valley Region
    1685 E Street
    Fresno, CA 93706
    Attention: Confined Animal Regulatory Unit

    For facilities in Butte, Lassen, Modoc, Plumas, Tehama, and Shasta counties, submit reports to:

    California Regional Water Quality Control Board
    Central Valley Region
    415 Knollcrest Drive, Suite 100

Attention: Confined Animal Regulatory Unit
Redding, CA 96002

For facilities in all other counties, submit reports to:

California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114
Attention: Confined Animal Regulatory Unit

D. Requirements Specifically for Monitoring Programs and Monitoring Reports:

1. The Discharger shall file self-monitoring reports and/or technical reports in accordance with the detailed specifications contained in the MRP attached to the Order.

2. The Discharger shall maintain a written monitoring program sufficient to assure compliance with the terms of the Order. Anyone performing monitoring on behalf of the Discharger shall be familiar with the written program.

3. The monitoring program shall include observation practices, sampling procedures, and analytical methods designed to ensure that monitoring results provide a reliable indication of water quality at all monitoring points.

4. All instruments and devices used by the Discharger for the monitoring program shall be properly maintained and shall be calibrated at least yearly to ensure their continued accuracy.

5. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records, instrumentation monitoring records, copies of all reports required by the Order, and records of all data used to complete the reports. Records shall be maintained for a minimum of five years from the date of sample, measurement, report, or application. Records shall also be maintained any time after CAFO operations cease but wastes that pose a threat to water quality remain at the site. This five year period may be extended during the course of any unresolved litigation regarding the discharge or when requested by the Regional Board Executive Officer.

   a. Records of on-site monitoring activities shall include the:

      (1) Date that observations were recorded, measurements were made, or samples were collected;

      (2) Name and signature of the individual(s) who made the observations, made and recorded the measurements, or conducted the sampling;

(3) Location of measurements or sample collection;

(4) Procedures used for measurements or sample collection;

(5) Unique identifying number assigned to each sample; and

(6) Method of sample preservation utilized.

b. Records of laboratory analyses shall include the:

(1) Results for the analyses performed on the samples that were submitted;

(2) Chain-of-custody forms used for sample transport and submission;

(3) Form that records the date that samples were received by the laboratory and specifies the analytical tests requested;

(4) Name, address, and phone number of the laboratory which performed the analysis;

(5) Analytical methods used;

(6) Date(s) analyses were performed;

(7) Identity of individual(s) who performed the analyses; and

(8) Results for the quality control/quality assurance (QA/QC) program for the analyses performed.

6. For statistical analysis of data, the Discharger shall use one of the methods described in of Title 27 CCR Section 20415(e)(8)(A-E). A non-statistical data analysis method can be used if the method can achieve the goal of the particular monitoring program at least as well as the most appropriate statistical method. The Discharger shall use a statistical or nonstatistical data analysis method that complies with Title 27 CCR Section 20415(e)(7, 8, 9, and 10) to determine whether there has been a "measurably significant" increase (should be "change"….lets not assume an increase) at downgradient monitoring points relative to the upgradient monitoring point(s). For any given monitoring point at which a given constituent has already exhibited a measurably significant indication of a release at that monitoring point, the Discharger may propose to monitor the constituent at that point by using a concentration-versus-time plot.

7. The statistical test method used by the Discharger to analyze the monitoring data shall include a procedure to verify that there is "measurably significant" evidence of an increase at a downgradient monitoring point. The verification procedure shall include either a single "composite" retest (i.e., a statistical analysis that augments and reanalyzes the data from the monitoring point that indicated a release) or shall consist of at least two "discrete" retests

(i.e., statistical analyses each of which analyzes only newly-acquired data from the monitoring point that indicated a release). The verification procedure shall comply with the requirements of Title 27 CCR Section 20415(e)(8)(E) in addition to the performance standards of Title 27 CCR Section 20415(e)(9).

E. Enforcement

1. California Water Code Section 13385(a) provides that any person who violates the Order or other specified, including a provision implementing Clean Water Act Sections 301, 302, 306, 307, 308, 318, or 405 shall be subject to civil liability. Administrative civil liability may range from a maximum of $10,000 per day or $25,000 per day of such violation. An additional liability of ten dollars ($10) up to twenty-five dollars ($25) per gallon may be imposed where there is a discharge of more than 1,000 gallons, any portion of which is not susceptible to cleanup or is not cleaned up.

2. California Water Code Section 13385(h)(1) provides that a mandatory minimum penalty of $3,000 shall be assessed for each serious violation. California Water Code Section 13385.1(a)(1) provides that a "serious violation" includes "*...a failure to file a discharge monitoring report required pursuant to Section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations.*"

3. California Water Code Section 13387(e) provides that any person who knowingly makes any false statement, representation, or certification in any record, report, plan, notice to comply, or other document filed with a regional board or the State Board, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required under this division shall be punished by a fine of not more than twenty-five thousand dollars ($25,000), or by imprisonment in the state prison for not more than two years, or by both.

4. California Water Code Section 13350 provides that any person who violates WDRs or a provision of the California Water Code is subject to civil liability of up to $5,000 per day or $15,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil liability of up to $10 per gallon, or $20 per gallon; or some combination thereof, depending on the violation, or upon the combination of violations.